

Section 3-3: Linear-Combination Situations

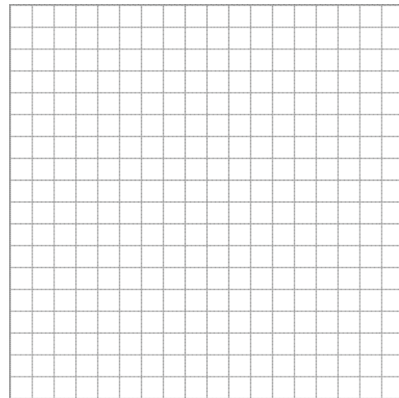
Warm-up: At a bake sale, bread costs \$2 a loaf and cakes cost \$3 each. Suppose you want to buy some bread and cake and spend exactly \$20. How many different combinations of bread and cake can you buy?

Linear Combination:

Example 1: Matt Mitarnowski sold \$36 worth of tickets for the Big Guy Club Picnic. Adult tickets cost \$5 and kid tickets cost \$2.

a. Write an equation for the situation.

b. Make a table and graph the situation.



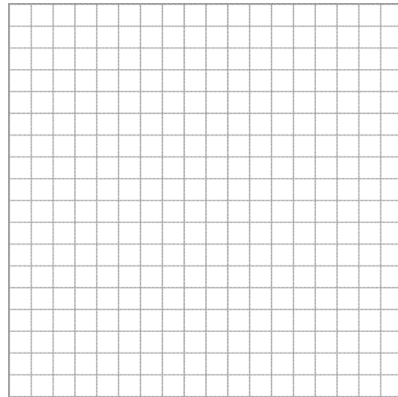
Here, we see a discrete domain. We can also have a continuous domain.

Example 2: Mixtures A and B contain weed killer and water. Mixture A is 5% weed killer and mixture B is 15% weed killer.

a. Write an equation

b. How many ounces of 5% solution must be added to 50 oz. of 15% solution to get 12 oz. of weed killer?

c. Graph a situation where the final mixture gives 12 ounces of weed killer in the final mix.



Homework:

"Hold yourself responsible for a higher standard than anyone else expects of you. Never excuse yourself." - Henry Ward Beecher